many cases during the last three years, and had always found it safe and efficacious; and he concluded by exhibiting twenty-nine fibrous polpyi that he had removed in this way from the interior of the cavity of the body of the uterus of an unmarried woman aged 56, at four operations; three being removed in the first operation, in September, 1867; nine in the second, in March, 1868; eleven in the third, in May; and six in the following July, when the interior of the uterus was freely painted over with strong nitric acid, with the hope of preventing their further growth; and, for so far, with good effect. The tumours were found, on microscopial examination, to be simply fibrous, differing in this respect from the recurrent fibroid tumours described by West and others; and Dr. Kidd stated that he believed the case to be unique in the annals of medicine.—*Proceedings of Brit. Med. Ass.*, in *Brit. Med. Journ.*, Aug. 8, 1868.

## MEDICAL JURISPRUDENCE AND TOXICOLOGY.

53. *Toxicological action of Prussic Acid; Atropia as an Antidote.*—M. W. PREYER has arrived at the following most important conclusions from a series of ingenious arguments and experiments. In comparatively moderate, but yet fatally poisonous doses, prussic acid acts by very suddenly and completely depriving the blood of its oxygen. The phenomena being only an exaggerated and intensified representation of what occurs when an animal is made to breathe unmixed hydrogen for some time. Supposing the poisoning to have been accomplished, then, by a comparatively moderate dose, resaturation of the blood with oxygen, if it can be quickly enough accomplished, will infallibly restore the animal to life. On the other hand, prussic acid, given in *very large* doses, paralyzes the heart, and is absolutely fatal. Those cases in which there is apnœa, and the heart is beating, remain open for treatment. M. Preyer was led to believe that the true physiological antidote for prussic acid was an agent which (without producing any other important poisonous effects) would paralyze the peripheral branches of the vagus in the lungs and in the heart; and, on the other hand, stimulate the central nervous apparatus of respiration in such a manner as to produce rapid respirations. He now makes the very important announcement, that sulphate of atropia acts precisely in this way, and he has demonstrated on rabbits and guinea-pigs, that the subcutaneous injection of a very small dose of this agent, if performed pretty quickly after the injection of the prussic acid, is an *unfailing antidote*. Apparently he would recommend the injection of quite small doses ($\frac{1}{75}$th grain?).—*The Practitioner*, August, 1868.

54. *Poisoning from Eating Bread containing Ergot.*—Dr. FLINZER (*Von Horn's Vjschr. f. Gess. Med.*, viii., 1868) states that the entire family of a farmer, consisting, with his labourers, of over ten persons in all, after partaking of bread containing a large portion, say one-tenth, of ergoted rye, sickened. The symptoms were at first debility, giddiness, and loss of appetite; subsequently were added a feeling of distress, a creeping sensation in the hands and feet, tonic contractions of the extremities, profuse sweating, great thirst, and diarrhœa. A pregnant female was brought to bed five weeks before her proper time. Two of the patients died, but the fact became known too late to allow of an autopsy being made.—*Centralblatt f. d. Medicinisch. Wissenchtn.*, 1868.

D. F. C.

55. *Experiments with the Poison of the Cobra di Capella.*—Dr. JOHN SHORTT, of Madras, has published (*Lancet*, May 2d and 16th), an account of a number of experiments made by him on this poison.

A review of all his experiments leads him to conclude that the effects of the cobra poison observed in mammals and birds are the following:—

"The poison injected having found its way into the circulation, restlessness, dulness, drooping of the head, and jactitation follow successively. The restlessness and change of position of the animal are constant. The bowels are evacuated, and the urine is passed. The pupils act irregularly, dilating or contracting. Respiration is slow and irregular, at times stertorous, with foam or frothy mucus issuing from the mouth, spasms, and muscular twitching. Reflex action is arrested, as the animal cannot be roused by pricking or pinching the skin. Consciousness and ocular recognition continue to the last in most instances; sensation is retained, though modified; whilst the paralysis is incomplete. The voluntary movements, sometimes after becoming more energetic, soon cease altogether; and the animal may die without the slightest trace of convulsion or tetanic spasms. When the poison has been rapidly absorbed, its effects become apparent more quickly; and the venom is readily absorbed by any living tissue.

The post-mortem examination discovers the right side of the heart to contain some tarry-looking, black, soft clots of blood; and the left side empty. The entire venous system is engorged with the same kind of blood, more especially the large venous trunks. The liver is found hyperæmic, enlarged and dark-coloured.

The first effect of the poison in the system seems to me to damage the current of blood, by the cells of the poison perhaps deranging the vital affinities existing between the blood-corpuscles and the serum in which they float, and by that means the nervous centres are affected and nutrition arrested. On life becoming extinct, the pupils remain permanently dilated, and the blood found in larger vessels, when removed from the body, coagulates within four or five minutes after death. Rigor mortis absent, the limbs remaining supple for hours after life becomes extinct, except only in a few instances, when it occurred in a couple of hours.

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## HYGIENE.

56. *Air of Hospitals, in reference chiefly to the Presence of Microscopic Germs.*—Mr. LUND, of Manchester, in a paper read before the British Medical Association (*Lancet*, Aug. 15, 1868) detailed some experiments which he had made on the air in one of the surgical wards of the Manchester Royal Infirmary. The ward in which the experiments were conducted contained four beds, and had a cubical capacity of about 5400 feet. A fluidounce of distilled water was placed in a pint stoppered glass bottle, and by removing the stopper, raising the bottle sharply through the air, reclosing and quickly shaking it, the water and the air were intimately mixed; and this process was repeated in all fully 500 times, until the water, previously transparent, had become slightly opalescent. In the deposit thus thrown down, after forty-eight hours, distinct evidences of the presence of organic life were perceptible under the microscope, and on the fifth day there were numerous actively moving vorticelli, with abundance of monads in ceaseless motion. From this it was inferred, if the same experiments were repeated under more varying circumstances, it might be shown that the presence, in the air, of microscopic organic germs was a constant condition easily detectible. The simplicity of the experiment, and the evidence derived from it, attracted much attention.